



True/s  
PATENT

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In Re Application of:

Mauldin, et al.

Serial No.: 10/708,693

Filed: June 4, 2004

For: Separation of Polyolefins from Nylon

Confirmation No.:

Group Art Unit: 1711

Examiner: Boykin

Docket No.: 820322-1030

**INFORMATION DISCLOSURE STATEMENT**

Commissioner for Patents  
P.O. Box 1450  
Alexandria, Virginia 22313-1450

05/05/2005 YPOLITE1 00000040 200778 10708693  
01 FC:1806 180.00 DA

Sir:

This information disclosure statement is filed in accordance with 37 C.F.R. §§ 1.56, 1.97, and 1.98, and specifically:

- ☐ under 37 CFR 1.97(b), or  
(within Three months of filing national application; or date of entry of international application; or before mailing date of first office action on the merits; whichever occurs last)
- ☒ under 37 CFR 1.97(c) together with either a:  
☐ Statement Under 37 C.F.R. 1.97(e), or  
☒ a \$180.00 fee under 37 CFR 1.17(p), or  
(After the CFR 1.97(b) time period, but before the final office action or notice of allowance, whichever occurs first)
- ☐ under 37 CFR 1.97(d) together with a:  
☐ Statement under 37 CFR 1.97(e), and  
☐ a \$180.00 petition fee set forth in 37 CFR 1.17(p).  
(Filed after final office action or notice of allowance, whichever occurs first, but before payment of the issue fee)

At any time during the pendency of this application, please charge any fees required to Deposit Account 20-0778 pursuant to 37 CFR 1.25. The Commissioner is hereby requested to credit any overpayment to Deposit Account No. 20-0778.

- ☒ Applicant(s) submit herewith *Form PTO 1449A - Information Disclosure Statement by Applicant* together with copies (where required) of patents, publications or other information of which applicant(s) are aware, which applicant(s) believe(s) may or may not be material to the examination of this application and for which there may be a duty to disclose in accordance with 37 CFR 1.56. As required by 37 C.F.R. §1.98(a), a legible copy of each document is provided.
- ☐ A concise explanation of the relevance of foreign language patents, foreign language publications and other foreign language information listed on PTO Form 1449, as presently understood by the individual(s) designated in 37 CFR 1.56(c) most knowledgeable about the content is given on the attached sheet, or where a foreign language patent is cited in a search report or other action by a foreign patent office in a counterpart foreign application, an English language version of the search report or action which indicates the degree of relevance found by the foreign office is listed on the form PTO 1449 and is enclosed herewith.

The following rights are reserved by the Applicant(s): the right to establish the patentability of the claimed invention over any of the listed documents should they be applied as reference, and/or the right to prove that some of these documents may not be prior art, and/or the right to prove that some of these documents may not be enabling for the teachings they purport to offer.

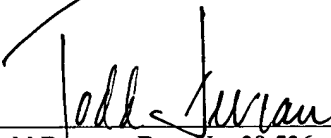
This statement should not be construed as a representation that an exhaustive search has been made, or that information more material to the examination of the present application does not exist. Any statements or identifications regarding the relevance of any portion(s) of cited references should not be construed as a representation that the most relevant portion(s) have been identified, and the absence of such statements or identifications should not be construed as representations that there are no relevant portion(s). The Examiner is specifically requested not to rely solely on the materials submitted herewith. The Examiner is requested to conduct an independent and thorough review of the documents, and to form independent opinions as to their significance.

It is requested that the information disclosed herein be made of record in this application and that the Examiner initial and return a copy of the enclosed PTO-1449 to indicate the documents have been considered.

Respectfully Submitted,

**THOMAS, KAYDEN, HORSTEMEYER  
& RISLEY, L.L.P.**

By:

  
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Form PTO-1449

Attorney Docket No.  
**820322-1030**Serial No.  
**10/708,693****INFORMATION DISCLOSURE CITATION**

MAY 05 2005

*(Use several sheets if necessary)*Applicant  
**Mauldin, et al.**Filing Date  
**June 4, 2004**Group  
**1711****U.S. PATENT DOCUMENTS**

Examiner Initials	Item	Document Number	Date (MM/DD/YYYY)	Name	Class	Subclass	Filing Date If Appropriate
	A1	2002/0184816	12/12/2002	Philipson			
	A2	2004/0086682	05/06/2004	Rice, et al.			
	A3	2003/0075824	04/24/2003	Moore, Jr., et al.			
	A4	2004/0055951	03/25/2004	Shiotani, et al.			
	A5	2001/0051248	12/13/2001	Jerdee, et al.			
	A6	2004/0048035	03/11/2004	Bailey, et al.			
	A7	2004/0001934	01/01/2004	Young			
	A8	2,639,278	05/19/1953	Stott, et al.			
	A9	2,958,677	11/01/1960	Kleinschmidt			
	A10	3,006,867	10/31/1961	Simon			
	A11	3,696,058	10/03/1972	Teti			
	A12	4,003,880	01/18/1977	Sidebotham, et al.			
	A13	4,003,881	01/18/1977	Sidebotham, et al.			
	A14	4,064,079	12/20/1977	Sidebotham, et al.			
	A15	4,079,001	03/14/1978	Haase, et al.			
	A16	4,110,071	08/29/1978	Schaub, et al.			
	A17	4,118,187	10/03/1978	Sidebotham, et al.			
	A18	4,137,393	01/30/1979	Sidebotham, et al.			
	A19	4,146,704	03/27/1979	Seki, et al.			
	A20	4,165,288	08/12/1979	Teed, et al.			
	A21	4,207,184	06/10/1980	Kaiser, et al.			
	A22	4,404,104	09/13/1983	Wurster, et al.			
	A23	4,416,936	11/22/1983	Erickson, et al.			
	A24	4,546,128	10/08/1985	Nakajima			
	A25	4,581,144	04/08/1986	Marchesi			
	A26	4,613,664	09/23/1986	Tate, et al.			
	A27	4,809,397	03/07/1997	Jacobs, et al.			
	A28	4,880,510	11/14/1989	Uhrich			
	A29	5,198,471	03/30/1993	Nauman, et al.			
	A30	5,236,959	08/17/1993	Oakley, et al.			
	A31	5,240,530	08/31/1993	Fink			

\* EXAMINER: Initial if citation considered, whether or not citation is in conformance with MPEP § 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to the applicant.

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**Mauldin, et al.**Filing Date  
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**1711****U.S. PATENT DOCUMENTS**

	B1	5,241,066	08/31/1993	David, et al.			
	B2	5,246,467	09/21/1993	Cockett, et al.			
	B3	5,278,282	01/11/1994	Nauman, et al.			
	B4	5,280,105	01/18/1994	Moran, Jr.			
	B5	5,288,349	02/22/1994	Fink			
	B6	5,294,384	03/15/1994	David, et al.			
	B7	5,342,854	08/30/1994	Serad			
	B8	5,360,551	11/01/1994	Weber			
	B9	5,430,068	07/04/1995	Subramanian			
	B10	5,453,202	09/26/1995	Marchesi			
	B11	5,456,872	10/10/1995	Ahrweiler			
	B12	5,462,223	10/31/1995	Isao, et al.			
	B13	5,472,763	12/05/1995	Schwarz, et al.			
	B14	5,481,786	01/09/1996	Smith, et al.			
	B15	5,516,050	05/14/1996	Yamamoto, et al.			
	B16	5,518,188	05/21/1996	Sharer			
	B17	5,532,035	07/02/1996	Corbin, et al.			
	B18	5,538,776	07/23/1996	Corbin, et al.			
	B19	5,556,684	09/19/1997	Forero			
	B20	5,565,158	10/15/1996	Sullivan, et al.			
	B21	5,578,357	11/26/1996	Fink			
	B22	5,591,802	01/07/1997	David, et al.			
	B23	5,598,980	02/04/1997	Dilly-Louis, et al.			
	B24	5,604,009	02/18/1997	Long, et al.			
	B25	5,626,939	05/06/1997	Kotlair, et al.			
	B26	5,630,896	05/20/1997	Corbin, et al.			
	B27	5,639,379	06/17/1997	Stogner, Jr.			
	B28	5,665,784	09/09/1997	Moore, et al.			
	B29	5,704,104	01/06/1998	Bacon, et al.			
	B30	5,728,444	03/17/1998	Fink			
	B31	5,769,335	06/23/1998	Shutov			
	B32	5,780,520	07/14/1998	Reeves, et al.			

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**1711****U.S. PATENT DOCUMENTS**

	C1	5,786,280	07/28/1998	Funger, et al.			
	C2	5,792,336	08/11/1998	Nikolaevsky, et al.			
	C3	5,824,709	10/20/1998	Suka			
	C4	5,829,690	11/03/1998	Deschamps			
	C5	5,840,773	11/24/1998	Booij, et al.			
	C6	5,849,804	12/15/1998	Sarian, et al.			
	C7	5,859,071	11/12/1999	Young, et al.			
	C8	5,889,142	03/30/1999	Mohajer, et al.			
	C9	5,897,066	04/27/1999	Bacon, et al.			
	C10	5,898,063	04/27/1999	Stefandl			
	C11	5,912,062	06/15/1999	Kotliar, et al.			
	C12	5,914,353	06/22/1999	Grizzle, et al.			
	C13	5,919,717	07/06/1999	Wallick			
	C14	5,952,660	09/14/1999	Kip, et al.			
	C15	5,989,296	11/23/1999	Patton, et al.			
	C16	5,994,417	11/30/1999	Roberts, et al.			
	C17	6,036,726	03/14/2000	Yang, et al.			
	C18	6,037,282	03/14/2000	Milding, et al.			
	C19	6,051,300	04/18/2000	Fink			
	C20	6,059,207	05/09/2000	Costello, et al.			
	C21	6,061,876	05/16/2000	Rowe			
	C22	6,083,283	07/04/2000	Berkstresser, IV, et al.			
	C23	6,126,096	10/03/2000	Robinson, et al.			
	C24	6,140,463	10/31/2000	Stefandl			
	C25	6,155,020	12/05/2000	Deem			
	C26	6,155,429	12/05/2000	Clark			
	C27	6,180,192	01/30/2001	Smith, et al.			
	C28	6,211,275	04/13/2001	Xanthos, et al.			
	C29	6,213,557	04/10/2001	Aebischer, et al.			
	C30	6,291,048	09/18/2001	Jerdee, et al.			
	C31	6,299,961	10/09/2001	Pelzer			
	C32	6,306,303	10/23/2001	Goebel, et al.			

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	D1	6,398,891	06/04/2002	Corbin, et al.			
	D2	6,503,595	01/07/2003	Kim, et al.			
	D3	6,610,769	08/26/2003	Blanpain, et al.			

**FOREIGN PATENT DOCUMENTS**

		Document Number	Date (MM/DD/YYYY)	Country	Class	Subclass	Translation	
							Yes	No
	D4	143,502	11/15/1971	Czechoslovakia			X	
	D5	0 759 456	02/26/1997	Europe			X	
	D6	0 603 434	06/29/1994	Europe			Abstract	
	D7	43 43 784	07/14/1994	Germany			X	
	D8	2000-044724	02/15/2000	Japan			X	
	D9	WO 98/06778	02/19/1998	PCT			X	
	D10	WO 98/35077	08/13/1998	PCT			X	
	D11	WO 98/35998	08/20/1998	PCT			X	
	D12	WO 99/40250	08/12/1999	PCT			X	
	D13	WO 00/27245	05/18/2000	PCT			X	
	D14	WO 00/27916	05/18/2000	PCT			X	
	D15	WO 00/29463	05/25/2000	PCT			X	
	D16	WO 01/45942	06/28/2001	PCT			X	
	D17	WO 01/76869	10/18/2001	PCT			X	
	D18	WO 02/01989	01/10/2002	PCT			X	
	D19	WO 02/02310	01/10/2002	PCT			X	
	D20	WO 02/02864	01/10/2002	PCT			X	
	D21	WO 02/11589	02/14/2002	PCT			X	

**OTHER DOCUMENTS (Including Author, Title, Date, Pertinent Pages, etc.)**

	D22	Abdel-Gawad AS Emara, Abdel-Fattah AA, Ebraheem SE. (2001) The Destructive Degradation of Some Organic Textile Dye Compounds Using Gamma Ray Irradiation. In: Use of Irradiation for Chemical and Microbial Decontamination of Water, Wastewater and Sludge. Final Report of a Co-ordinated Research Project, pp. 97-119.					
	D23	Bloch DR. Solvents and Non Solvents for Polymers. In: Polymer Handbook, Eds. Bandrup, J. Immergut, EH, Grulke, EA, 4 <sup>th</sup> Edition, John Wiley, New York, pp. 497-545, 1999.					
	D24	Calabro V, Pantano G, et al. Experimental Study on Integrated Membrane Processes in the Treatment of Solutions simulating Textile Effluents. Energy and Exergy Analysis. In: Desalination. 78:257-277, 1990.					
	D25	Dávila-Jiménez MM, Elizalde-González, et al. Electrochemical treatment of textile dyes and their analysis by high-performance liquid chromatography with diode array detection. In: Journal of Chromatography. A, 889:253-259, 2000.					

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E1	Dessouki AM, Abdel-Aal SE, et al. Use of Polymeric and Natural Materials for the Removal of Irradiated Direct and Acid Dyes form Effluents. Seventh Conference of Nuclear Sciences & Applications 6-10 February 2000, Cairo, Egypt.
E2	Gültekin I and Ince NH. Kinetics of Textile Dye Degradation by UV/H <sub>2</sub> O <sub>2</sub> Process. International conference on oxidation technologies for water and wastewater treatment, with technical exhibitions, 18-22 May 2003, Goslar, Germany.
E3	Kos L, Perkowski J. Decoloration of Real Textile Wastewater with Advanced Oxidation Processes. In: Fibres & Textiles in Eastern Europe. 11(4(43)):81-85, 2003.
E4	Mihut C, Captain DK, et al. Review: Recycling of Nylon From Carpet Waste. In: Polymer Engineering and Science. 41(9):1457, 2001.
E5	Muegge, J and Yernaux JM. Recovery of Plastics Using Solvents. In: Plastics in End of Life Vehicles. pp. 1-4, 2002.
E6	Ögütveren ÜB and Koparal S. Color Removal From Textile Effluents by Electrochemical Destruction. In: J. Environ. Sci. Health. A29(1):1-16, 1994.
E7	Pelegrini R, Peralta-Zamora P, et al. Electrochemically Assisted Photocatalytic Degradation of Reactive Dyes. In: Applied Catalysis B: Environmental. 22:83-90, 1999.
E8	Perkowski J, Kos L, et al. Decomposition of Anthraquinone Dye Acid Blue 62 by the Decoloration of Textile Wastewater by Advanced Oxidation Process. In: Fibres & Textiles in Eastern Europe. 2(41):88-94, 2003.
E9	Prevot AB, Basso A, et al. Analytical Control of Photocatalytic Treatments: Degradation of a Sulfonated Azo Dye. In: Anal. Bioanal. Chem. 378:214-220, 2003.
E10	Şolpan D and Güven. Decoloration and Degradation of Some Textile Dyes by Gamma Irradiation. In: Radiation Physics and Chemistry. 65:549-558, 2002.
E11	Starkweather HW and Jones, GA. Crystalline Transitions in Powders of Nylon 66 Crystallized from Solution. In: Journal of Polymer Science: Polymer Physics Ed. 19:467-477, 1981.
E12	Xu Y. Comparative Studies of the Fe <sup>3+/2+</sup> -UV, H <sub>2</sub> O <sub>2</sub> -UV, TiO <sub>2</sub> -UV/vis Systems for the Decolorization of a Textile Dye X-3B in Water. In: Chemosphere 43:1103-1107, 2001.
E13	Nylon 6,6 Specific Heat and Heat of Melting. In: Manufacturing Engineer's Reference Book, 1993.

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